

What is claimed is:

1. An optical fiber grating part comprising ;
an elongated pedestal, and
5 a base plate installed on said pedestal, and having a different coefficient of
liner thermal expansion from said pedestal, and
an optical fiber passing through said pedestal, and connected to connection
points installed on said pedestal or said base plate located apart from each
other in the longitudinal direction of said pedestal, and having an optical fiber
10 grating located between said connection points,
wherein a predetermined tensile force is added to said optical fiber grating,
and
said pedestal and said base plates thermally expand or thermally shrink
independently in the longitudinal direction of said pedestal, and
15 an extension line of an axis of said optical fiber joining said connection points
passes through a contact surface between said pedestal and said base plate.
2. An optical fiber grating part comprising ;
an elongated pedestal, and
20 a base plate installed on said pedestal, and having a different coefficient of
liner thermal expansion from said pedestal, and
an optical fiber passing through said pedestal, and connected to connection
points installed on said pedestal or said base plate located apart from each
other in the longitudinal direction of said pedestal, and having an optical fiber
25 grating located between said connection points,
wherein a predetermined tensile force is added to said optical fiber grating,
and
said pedestal and said base plates thermally expand or thermally shrink
independently in the longitudinal direction of said pedestal, and

an offset distance between said connection point and a contact surface of said pedestal and said base plate is minimized.

3. The optical fiber grating part as claimed in claim 1 or 2,
wherein a pair of said base plates are installed apart from each other in the
5 longitudinal direction of said pedestal and each said base plate has said
connection points respectively.

4. The optical fiber grating part as claimed in any one of claim 1 to 3,
wherein a dimension of said connection part is 1.0015 times or more larger
10 than that of said connection concavity in the longitudinal direction of said
pedestal.

5. The optical fiber grating part as claimed in any one of claim 1 to 3,
wherein said connection part is assembled with said connection concavity with
15 press fitting.

6. The optical fiber grating part as claimed in any one of claim 1 to 3,
wherein said connection part is assembled with said connection concavity with
freeze fitting.

20

7. The optical fiber grating part as claimed in any one of claim 1 to 3,
wherein said pedestal is made of the inber and said base plate is made of
aluminum.

25